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Brigitte Mandel
Acting Division Administrator
Federal Highway Administration
2520 West 4700 South, Suite 9A
Salt Lake City, Utah 84118

Bryan Adams
Region Two Director
Utah Department of Transportation
2010 South 2760 West
Salt Lake City, Utah 84104

Re: I-80 and State Street Interchange Draft Environmental Impact Statement; CEQ # 20160023

Dear Ms. Mandel and Mr. Adams:

The U.S. Environmental Protection Agency Region 8 has reviewed the I-80 and State Street Interchange Draft Environmental Impact Statement (EIS) developed by the Federal Highway Administration (FHWA). In accordance with our responsibilities under Section 102(2)(C) of the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, the EPA has reviewed and rated this Draft EIS.

Project Background

The project area is located primarily in the City of South Salt Lake, Utah. The project area extends along a section of Interstate 80 between Interstate 15 and 700 East. The study area also includes a section of State Street from 2100 South to 2700 South. The EIS defines the purpose and need for action as the reduction of congestion on I-80 and State Street, improvement of operational characteristics on I-80 and State Street as well as support of economic development.

Conclusion and Rating

Pursuant to the EPA policy and guidance, the EPA rates the environmental impact of an action and the adequacy of the NEPA analysis. The EPA has rated the preferred alternative "EC-2" (Environmental Concerns-Insufficient information). This "EC" rating means that the review has identified environmental impacts that should be avoided in order to fully protect the environment. The "2" rating indicates there was insufficient information for the EPA to fully assess the environmental impacts that should be avoided in order to fully protect the environment. These concerns appear to be resolvable between the Draft and Final EIS. An explanation of the rating criteria is at http://www.epa.gov/nepa/environmental-impact-statement-rating-system-criteria.

The EPA has rated the environmental impact and adequacy of the document based on the following:

- Lack of air quality emissions inventory data with respect to the 24-hour particulate matter $(PM)_{2.5}$ and 24-hour PM_{10} National Ambient Air Quality Standards (NAAQS) non-attainment designations for the project area.
- Lack of project level emissions inventory for carbon monoxide, nitrogen oxides, $PM_{2.5}$ and PM_{10} for complete public disclosure. Modeling can be completed using EPA's MOVES 2014a analytical tool.
- Lack of current road dust emissions information for paved roads per EPA's Compilation of Air Pollutant Emission Factors, also known as AP-42, Chapter 13.
- Lack of analysis for expected concentrations of mobile sources air toxics (MSATs) across alternatives using the MOVES 2014a model.
- Lack of analysis of the effects of climate change on the project and greenhouse gas emission related to the project.
- Potential effects of the project on nearby communities, including environmental justice (EJ) communities, regarding analysis of air quality factors identified above.

We have enclosed more detailed comments. We appreciate the opportunity to review this project. If you have any questions or would like to discuss our comments, please contact me at (303) 312-6704, or Matt Hubner of my staff at (303) 312-6500.

Sincerely,

Philip S. Strobel, Director
Director, NEPA Program
Office of Ecosystems Protection and Remediation

Enclosure

cc: Bryan Dillon, Area Engineer, Federal Highway Administration
Peter Tang, Project Manager, Utah Department of Transportation
Nicole Tolley, Horrocks Engineers

I-80 and State Street Interchange Draft Environmental Impact Statement

EPA Detailed NEPA Comments

Air Quality

The EPA notes that Salt Lake County is designated nonattainment for the 24-hour particulate matter (PM_{10}) and the 2006 24-hour $PM_{2.5}$ National Ambient Air Quality Standards (NAAQS). Further, the Salt Lake County area was unable to demonstrate attainment of the 2006 24-hour $PM_{2.5}$ NAAQS by its attainment date of December, 2015. For these reasons, we recommend that additional specific air quality information, as described below, be provided for the No Action Alternative and the Preferred Alternative in Section 3.9 "Air Quality" in the Final EIS. The purpose of this additional information is to both inform the public and provide the basis for the Record of Decision (ROD).

As discussed in Section 3.9 "Air Quality," it appears the overall emphasis to address air quality for this project rests with traffic data and level of service (LOS). Additional specific data, such as calculated mobile sources emissions that would provide the basis for determining that the project will not interfere with the Salt Lake County area's ability to attain the $PM_{2.5}$ NAAQS, are not provided.

As noted in our September 25, 2014 scoping comments, preparation of criteria pollutant emissions inventory data would be beneficial for supporting the evaluation of both the No Action and Preferred Alternative aspects of the project. Emission inventory data would provide the emissions burden of several criteria pollutants along with Mobile Sources Air Toxics (MSATs). PM_{10} (tailpipe/brake wear/tire wear and re-entrained road dust) would be useful, especially for road dust PM_{10} since it will increase with increasing vehicle miles traveled (VMT) in 2040. In addition, presenting emission inventory data for $PM_{2.5}$, and its precursor emissions of nitrogen oxides (NOx) and volatile organic compounds (VOCs) is important. We note that the State's $PM_{2.5}$ nonattainment area state implementation plan (SIP) revision, submitted to the EPA on December 16, 2014, identifies and includes VOCs as a $PM_{2.5}$ precursor. Also, since this is a transportation project, emissions of carbon monoxide (CO) need to be included. The above criteria pollutants and precursor emissions can all be calculated with the EPA's MOVES2014a model. PM_{10} re-entrained road dust emissions can be calculated from EPA's AP-42, Chapter 13.

Section 3.9 "Air Quality" discusses MSATs, their derivation from vehicles, and their potential health effects, but does not provide any specific data derived from and relevant to the project. The MSAT section continues with information regarding studies, unavailability of health impact information, and speaks in terms such that the reader is advised that MSAT emissions will not have meaningful differences due to the size of the interchange project and between alternatives. For example, from p. 3-51, 2nd column, 2nd paragraph:

> "Also, regardless of the build alternative chosen, emissions would likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by over 80 percent between 2010 and 2050. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the

> EPA-projected reductions is so great that MSAT emissions in the study area are likely to be lower in the future in virtually all locations."

While this may be true, for the purposes of public disclosure of relevant information in the EIS process, we recommend including the estimated amount of the MSAT emissions burden for both the No Action and Preferred Alternative. The calculation of the MSAT emissions can be performed with MOVES2014a and at the same time that the criteria emissions, noted above, are being prepared using MOVES2014a.

Section 3.28 "Cumulative Impacts," p. 3-103, third paragraph: The EPA does not agree with statements presented:

> "Regional modeling conducted by the WFRC for the 2040 Regional Transportation Plan air quality conformity analysis demonstrated that all transportation projects in the 2015-2040 RTP would be in compliance with the NAAQS. Because conformity to the SIP will be required for all transportation projects, there would be no cumulative impacts to air quality. Population growth has had little effect on overall air quality as demonstrated by the continuing improvement in air quality throughout the region."

The regional mobile sources modeling performed by the Wasatch Front Regional Council (WFRC) was for determining transportation conformity for its 2040 Regional Transportation Plan (RTP). The WFRC was only addressing the transportation conformity requirements of 40 CFR 93.119 for an interim emissions test as on December 16, 2014. The State submitted a Clean Air Act section 189 impracticability demonstration SIP revision for the Salt Lake $PM_{2.5}$ nonattainment area. This SIP submittal did not contain identified motor vehicle emissions budgets (MVEB). Therefore, the WFRC was required to only show that direct $PM_{2.5}$, with its precursor emissions, were less than the nonattainment area's base year emissions. This does not show "compliance with the NAAQS" as the Salt Lake area continues to show violations of the 2006 24-hour $PM_{2.5}$ NAAQS.

Further, and in view of the above, with the Salt Lake area's inability to attain the 24-hour $PM_{2.5}$ NAAQS it is unclear how the above statement "Because conformity to the SIP will be required for all transportation projects, there would be no cumulative impacts to air quality" is correct. The EPA could only agree with such a statement if the State had been able to submit a SIP revision for the Salt Lake area that demonstrated attainment of the 24-hour $PM_{2.5}$ NAAQS and identified applicable MVEBs.

Finally, the statement "Population growth has had little effect on overall air quality as demonstrated by the continuing improvement in air quality throughout the region." needs clarification in view of the $PM_{2.5}$ data presented in Table 3-37 and because the Salt Lake area continues to violate the 24-hour $PM_{2.5}$ NAAQS.

Climate Change

In addition to the comments above regarding the quantification of emissions, we recommend the Final EIS include an estimate of the GHG emissions associated with the project, qualitatively

describe relevant climate change impacts, and analyze reasonable alternatives and/or practicable mitigation measures to reduce project-related GHG emissions. More specifics on those elements are provided below. In addition, we recommend that the NEPA analysis address the appropriateness of considering changes to the design of the proposal to incorporate GHG reduction measures and resilience to foreseeable climate change. We recommend that the Final EIS make clear whether commitments have been made to ensure implementation of design or other measures to reduce GHG emissions or to adapt to climate change impacts. More specifically, we suggest the following:

Environmental Consequences Section:

- Estimate the GHG emissions associated with the proposal and its alternatives. Example tools for estimating and quantifying GHG emissions can be found on CEQ's NEPA.gov website[1]. These emissions levels can serve as a basis for comparison of the alternatives with respect to GHG impacts.

- Describe measures to reduce GHG emissions associated with the project, including reasonable alternatives, BMPs or other practicable mitigation opportunities and disclose the estimated GHG reductions associated with such measures. For example, the Draft EIS discusses construction emissions as being potentially 5% to the total 20–year lifetime emissions of a roadway. The Draft then notes that the percentage can vary widely based on the extent of construction and vehicle use of the roadway. The document does not describe analysis of what the GHG emissions would be for this project, as advised above, nor does it provide measures or BMPs for reduction of GHG emissions for construction activities. The EPA further recommends that the Record of Decision commits to implementation of reasonable mitigation measures that would reduce or eliminate project-related GHG emissions, where possible.

Effects of Climate Change on Project Impacts:

We recommend that the Final EIS describe potential changes to the Affected Environment that may result from climate change. Including future climate scenarios in the Final EIS would help decision makers and the public consider whether the environmental impacts of the alternatives would be exacerbated by climate change. If impacts may be exacerbated by climate change, additional mitigation measures may be warranted.

Climate Change Adaptation:

We recommend considering climate adaptation measures based on how future climate scenarios may impact the project in the Final EIS. The National Climate Assessment (NCA), released by the U.S. Global Change Resource Program[1], contains scenarios for regions and sectors, including energy and transportation. Using NCA or other peer reviewed climate scenarios to inform alternatives analysis and possible changes to the proposal can improve resilience and

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[1] https://ceq.doe.gov/current_developments/GHG_accounting_methods_7Jan2015.html
[1] http://nca2014.globalchange.gov/

preparedness for climate change.

Changing climate conditions can affect a proposed project, as well as the project's ability to meet the purpose and need presented in the Draft EIS. The Draft EIS should evaluate the resilience and preparedness of highway infrastructure in relation to climate change. For instance, the Draft EIS could analyze whether projected extreme weather events or extreme temperatures may increase the need for highway maintenance in the future which could result in increased GHG emissions.

Environmental Justice

Due to the proximity of this project to environmental justice (EJ) communities, the air quality and public health factors identified above should be fully quantified and evaluated in the Final EIS. Because individuals in such communities often do not have the means to relocate, they are more susceptible to the cumulative effects of an action. Though the Draft EIS states that impacts to such communities would be negligible, without the information requested above, it is difficult to evaluate the accuracy of the conclusions that the communities in the vicinity of the project will not face any impacts.

Additionally, Wilson elementary school is located just south of I-80 on State Street and serves EJ populations on both sides of I-80. Children are also a sensitive population; therefore, it is important that the issues above be evaluated in the Final EIS to ensure the protection of human health.